

ABSTRACT OF THE DISCLOSURE

The invention provides a motor-driven injection molding apparatus in which an entire of the apparatus is simplified and made compact. In a motor-driven injection molding apparatus (1), a movable metal mold (12) clamped to a stationary metal mold (11) is mounted to a movable mold plate (13), and two ball screws (17, 18) for moving the movable mold plate (13) are passed through two points on opposing corners of the movable mold plate (13). End portions of the ball screws (17, 18) are set in a cantilever state, and are rotated via pulleys (55, 55) and a timing belt (56), thereby moving the movable mold plate (13). Further, the movable mold plate (13) is guided by a slide guide having a structure that a bearing unit (14) fixed to both sides of a lower portion thereof is fitted to linear rails (15, 16). On the other hand, in an injection side, a injection side movable plate (33) to which an injection plunger (42) is fixed by two tie bars (35, 36) and two ball screws (37, 38) on respective opposing corners, and the same slide guides as mentioned above moves.

The movable mold plate (13) is moved by the opening and closing side ball screws (17, 18) so as to be mold clamped, and the injection side movable plate (33) is thereafter moved so as to inject.